

# **SPECIFICATIONS**

for

**DOVER POINT ROAD BICYCLE SHOULDERS SIGNAGE  
CITYWIDE BICYCLE LOCKERS  
STATE PROJECT NO. 13128  
FEDERAL PROJECT NO. CM-X-5125 (019)**

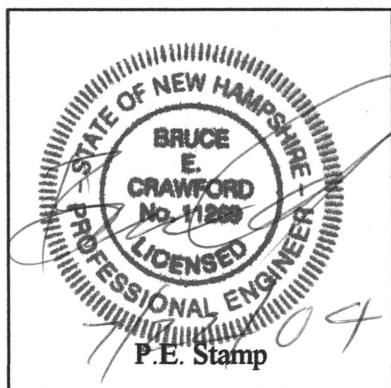
**CITY OF DOVER, NEW HAMPSHIRE**

**JULY, 2004**

**Prepared for**

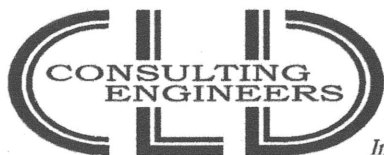
**PLANNING DEPARTMENT  
Municipal Building  
288 Central Avenue  
Dover, New Hampshire 03820**

**(603) 516-6008**



**Prepared by**

**Bid Document No.**



**Maine • New Hampshire • Vermont**

# TABLE OF CONTENTS

Invitation to Bid .....	00100
Bid Form .....	00200
General Conditions .....	00300
Supplemental Conditions .....	00350
Technical .....	INDEX
(Includes Sections 01000 - 03200)	
Sample Documents .....	Appendix A
1. Agreement	
2. Bid Bond	
3. Certification of Completion	
4. Change Order	
5. Notice of Award	
6. Notice to Proceed	
7. Payment Bond	
8. Performance Bond	
Federal Labor Standards Provisions .....	Appendix B

## PROJECT PRINTS INCLUDED



**City of Dover Invitation to Bid  
DOVER POINT ROAD BICYCLE SHOULDERS SIGNAGE  
CITYWIDE BICYCLE LOCKERS**

**Bid #B05008**

The City of Dover, New Hampshire is requesting sealed bids for the following project.  
Bids must be submitted in a sealed envelope plainly marked:

Sealed Bid # B05008 – Dover Point Road Bicycle Signs and Symbols  
City of Dover, NH – Purchasing Office  
288 Central Avenue  
Dover, NH 03820-4169

All bids must be received no later than August 5, 2004 at 2:00  
**p.m. local time.** No late bids and no telephone bids will be accepted. All bids must be made on  
the bid forms supplied, and the bid forms must be fully completed when submitted. A 10% Bid  
Bond, 100% Payment Bond, and 100% Performance Bond will be required.

**Federal wage rates apply to this contract.**

Specifications and copies of the contract documents may be obtained from the Office of  
the Purchasing Agent (located at City Hall, 288 Central Avenue, Dover, NH 03820) for a non-  
refundable fee of Forty-Five Dollars (\$45.00) in the form of cash or check (made payable to the  
City of Dover, NH). If any bidder wishes the contract documents mailed to him, the Purchasing  
Agent's office will send them by mail upon request. **The mailing cost will be charged via  
Federal Express to the recipient (bidder's Federal Express account number required). The  
\$45.00 plan fees must be received prior to the contract documents being mailed to interested  
parties.**

The contract documents may be examined at the following locations:

City of Dover Purchasing Office, 288 Central Avenue, Dover, NH 03820  
City of Dover Engineering Office, 271 Mast Road, Dover, NH 03820  
Dodge Reports/McGraw Hill, 55 S. Commercial Street, Manchester, NH 03101  
Construction Summary of NH, 734 Chestnut Street, Manchester, NH 03104  
CLD Consulting Engineers Inc., 316 U.S. Route 1, Suite D, York, ME 03909

The City of Dover reserves the right to reject any or all bids; the City reserves the right to  
award the bid deemed most advantageous to the City; the City reserves the right to accept the bid  
on one or more items of a proposal or any combination of items; and the City reserves the right  
to waive defects and informalities of bids.

Questions should be directed to Bruce Woodruff, City Planner at 603-516-6008, JoAnn  
Fryer, CLD Consulting Engineers, Inc. at 207-363-0669 or Daniel J. Kelly, City Purchasing  
Agent, at 603-516-6030.

## BID FORM

Proposal of

hereinafter called "BIDDER", organized and existing under the laws of the state of

doing business as

(insert "a corporation", "a partnership", or "an individual" as applicable)

to the **City of Dover, New Hampshire**, hereinafter called "**OWNER**".

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the project in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the **NOTICE TO PROCEED** and to fully complete the PROJECT within Sixty (60) consecutive calendar days thereafter. **If the CONTRACTOR fails to complete the project within the time limit, the OWNER may charge liquidated damages at a rate of \$100.00 per day for each work day after the completion date.**

BIDDER acknowledges receipt of the following ADDENDUM (if applicable):

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices:

### BID SCHEDULE (NOTE: BIDS shall include all applicable costs)

ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL PRICE
1. Mobilization	LS	_____	1	_____
2. Traffic Sign Type C	SqFt	_____	230	_____
3. Traffic Sign Type CC	SqFt	_____	100	_____

**BID SCHEDULE cont.**

(NOTE: BIDS shall include all applicable costs)

ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL PRICE
4. Pavement Markings-Symbols	Each	_____	80	_____
5. Hot Bituminous Pavement – Hand Method	Ton	_____	10	_____
6. Crushed Gravel	CY	_____	40	_____
7. Reset Granite Curbing	LF	_____	300	_____
8. Loam	CY	_____	40	_____
9. Seed & Fertilizer	SY	_____	140	_____
10. Bike Lockers	LS	_____	1	_____
11. Concrete Pads	CY	_____	10	_____
12. Traffic Control	LS	_____	1	_____

TOTAL BID \_\_\_\_\_  
(written)

\$ \_\_\_\_\_  
(U.S. Dollars)

**NOTE:** It is understood that the various unit prices bid will control in any contract which may be awarded arising from this Proposal; that the estimated quantities above are approximate only and used only for the comparison of bids; and are subject to increase or decrease as required to properly complete the Contract Work. It is further understood that any portion, or the entire amount, of any bid item(s) may be deleted in order to meet the allocated budget dollar amount. If any quantity in the BID is increased or decreased by **25%** of the amount in the BID SCHEDULE, or any item(s) or work is extended or increased by **25%** of the amount in the BID SCHEDULE, the OWNER retains the right to renegotiate the unit price of said item(s).

Bid Submitted by:

\_\_\_\_\_

Company Name

\_\_\_\_\_

Address

\_\_\_\_\_

City/Town

State

Zip

BIDDER hereby acknowledges by submission of bid that he/she has examined the site and specifications and will perform the complete job for the amounts indicated.

(SEAL - if BID by a corporation)

Attest: \_\_\_\_\_

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Name (Please Print)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date



# GENERAL CONDITIONS

## SECTION 00300

### A. DEFINITIONS

Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and the plural thereof:

1. **ADDENDA** - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications or corrections.
2. **BID** - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
3. **BIDDER** - Any person, firm or corporation submitting a BID for the WORK.
4. **CHANGE ORDER** - A written order to the CONTRACTOR authorizing an addition, deletion, or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the Contract Price or Contract Time.
5. **CONTRACT DOCUMENTS** - The contract, and all other items as listed in the agreement.
6. **CONTRACT PRICE** - The total moneys payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
7. **CONTRACT TIME** - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.
8. **CONTRACTOR** - The person, firm or corporation with whom the OWNER has executed the Agreement.
9. **DRAWINGS** - The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
10. **ENGINEER** - Shall mean the City Engineer for the City of Dover, New Hampshire, and his representative(s).
11. **FIELD ORDER** - A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME issued by the ENGINEER to the CONTRACTOR during construction.
12. **OWNER** - Shall mean the City of Dover, New Hampshire.
13. **PROJECT** - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.

14. **SHOP DRAWINGS** - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, supplier or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
15. **SPECIFICATIONS** - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.
16. **SUBCONTRACTOR** - An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
17. **SUBSTANTIAL COMPLETION** - That date as certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
18. **WORK** - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.
19. **WRITTEN NOTICE** - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the WORK.

## **B. SCHEDULES**

1. The CONTRACTOR shall submit to the OWNER (through the ENGINEER) a progress schedule for the prosecution of the WORK. The CONTRACTOR shall continually update said schedule on a weekly basis. The CONTRACTOR shall also submit a schedule of payments that he anticipates he will earn during the course of the WORK.
2. At the ENGINEER'S discretion, the CONTRACTOR may work on a weekend or City holiday; however, the CONTRACTOR will be billed for the ENGINEER'S overtime rate to have him present for inspection (assume an hourly rate of \$28.00).

## **C. DRAWINGS and SPECIFICATIONS**

The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.

In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.

Any discrepancies found between the DRAWINGS and the SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.

#### **D. SHOP DRAWINGS**

The CONTRACTOR shall provide SHOP DRAWINGS as may be necessary for the prosecution of the WORK. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS.

#### **E. MATERIALS, SERVICES and FACILITIES**

It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified times.

Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

#### **F. INSPECTION**

All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards as required and defined in the CONTRACT DOCUMENTS.

The CONTRACTOR shall provide at his expense the testing and inspection services required by the CONTRACT DOCUMENTS. The OWNER shall pay for inspection services not required by the CONTRACT DOCUMENTS.



Inspections, tests or approvals by the ENGINEER or others shall not relieve the CONTRACTOR from his obligations to perform the WORK and insure its final suitability.

The ENGINEER and his representatives will at all times have access to the WORK.

If any WORK is covered prior to inspection by the ENGINEER or contrary to the written instructions of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and replaced at the CONTRACTOR'S expense.

If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by the ENGINEER or others, the CONTRACTOR will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found defective, the CONTRACTOR will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

#### **G. SUBSTITUTIONS**

The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for items referenced in the CONTRACT DOCUMENTS, and if, in the opinion of the ENGINEER such item is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

#### **H. SURVEYS, PERMITS, and REGULATIONS**

The OWNER shall establish all base lines for locating the principal component parts of the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER the CONTRACTOR shall develop and make all detail surveys needed for construction such as working points, lines and elevations.

The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the CONTRACTOR. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER. The CONTRACTOR shall give notice and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified.



The CONTRACTOR shall notify Dig Safe (1-800-225-4977) **72 hours prior to excavation**. A digging permit will be required for street excavations within the City right-of-way. However, no fees will be charged to the CONTRACTOR for this permit. (See **Appendix B** for Trench Rules and Regulations.)

## **I. PROTECTION OF WORK, PROPERTY and PERSONS**

The CONTRACTOR will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the WORK. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.

The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, and SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.

The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.

In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER, shall act to prevent threatened damage, injury or loss. He will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby.

## **J. SUPERVISION BY CONTRACTOR**

The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR.

The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

#### **K. CHANGES IN THE WORK**

The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.

#### **L. TIME FOR COMPLETION**

It is the intent of the OWNER that this project proceed as quickly and efficiently as possible. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on the date specified in the NOTICE TO PROCEED.

The CONTRACTOR will proceed with the WORK at such a rate of progress to insure full completion within the contract time. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration average conditions prevailing in the locality of the WORK.

If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

The CONTRACTOR shall not be charged with liquidated damages when the delay in completion of the WORK is due to unforeseeable causes beyond the control of the CONTRACTOR (acts of God, acts of the OWNER) and which the CONTRACTOR has promptly given WRITTEN NOTICE of the delay to the OWNER.

#### **M. CORRECTION OF WORK**

The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re- execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

#### **N. SUBSURFACE CONDITIONS**

The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS: or

Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

The OWNER shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless he has given the required WRITTEN NOTICE; provided that the OWNER may, if he determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

#### **O. TERMINATION**

After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the Contract. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.

If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within a reasonable time, an adjustment in the Contract Price or an extension of the Contract Time, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

#### **P. PAYMENTS TO CONTRACTOR**

The CONTRACTOR and the ENGINEER will agree daily upon the quantities of pay items which were installed. The CONTRACTOR will sign off on the ENGINEER'S daily report to ensure accuracy and agreement to the quantities.

Once a month the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER'S title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment.



In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER shall retain ten percent (10%) of the amount of each payment until final completion and acceptance of all work covered by the CONTRACT DOCUMENTS. When the WORK has reached 80% complete the retained amount may be reduced to five percent (5%).

Upon completion of the WORK the CONTRACTOR shall submit a CERTIFICATE OF COMPLETION stating that the WORK has been completed by him under the conditions of the CONTRACT DOCUMENTS. Upon acceptance by the OWNER the balance found to be due to the CONTRACTOR, **excluding** a two percent (2%) retainage, shall be paid to the CONTRACTOR within one (1) year of said acceptance of the WORK. An invoice must be submitted for all payments and refunds of retainage.

The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from any claims growing out of the lawful demands of SUBCONTRACTOR'S, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK.

#### **Q. ACCEPTANCE OF FINAL PAYMENT AS RELEASE**

The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE BOND.

#### **R. INSURANCE**

The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S execution of the WORK, whether such execution be by himself or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

Claims under workmen's compensation, disability benefit and other similar employee benefit acts;

Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;

Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;

Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and

Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least fifteen (15) days prior WRITTEN NOTICE has been given to the OWNER.

The CONTRACTOR shall procure and maintain, at his own expense, during the Contract Time, liability insurance as hereinafter specified:

CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability as follows -

1. Comprehensive General Liability

- a. Coverages -
  - (1) Premises and Operations
  - (2) Completed Operations
  - (3) Contractual
  - (4) Owners and Contractors Protection
- b. Extended Term - Completed operations coverage shall be carried for one (1) year beyond the date of completion of the work.
- c. Limits for All Coverages
  - (1) Bodily Injury - Each Person \$500,000  
Each Occurrence \$1,000,000
  - (2) Property Damage - Each Occurrence \$500,000  
Aggregate \$1,000,000

2. Vehicle Liability Insurance

- a. Coverages -
  - (1) Owned vehicles
  - (2) Non-owned vehicles
  - (3) Hired vehicles
- b. Limits for all Coverages
  - (1) Bodily Injury - Each Person \$500,000/Each Occurrence \$1,000,000
  - (2) Property Damages - Each Occurrence \$200,000/Aggregate \$200,000

The CONTRACTOR shall procure and maintain, at his own expense, during the Contract Time, in accordance with the provisions of the laws of the State of New Hampshire, Workmen's

Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the PROJECT and in case any work is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are

covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the Contract Time, and until the WORK is accepted by the OWNER. The policy shall name as insured the CONTRACTOR and the OWNER.

The CONTRACTOR shall purchase at his own expense and furnish to the OWNER an OWNER'S Protective Public Liability Policy with Limits of \$500,000/\$1,000,000 for Bodily Injury and the same for Property Damage.

#### **S. CONTRACT SECURITY**

The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNER with a Performance Bond and a Payment Bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS. Such Bonds shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the State of New Hampshire.

#### **T. INDEMNIFICATION**

The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

#### **U. SUBCONTRACTING**

The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.

The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.



Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

All SUBCONTRACTORS are subject to prior approval of the OWNER. Approval will be based on prior work experience with the OWNER and by the SUBCONTRACTOR'S qualifications.

#### **V. ENGINEER'S AUTHORITY**

The ENGINEER shall act as the OWNER'S representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. He shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS. The ENGINEER shall decide all questions of any nature whatsoever arising out of, under, or in connection with or in any way related to or on account of this Contract, including the power to decide breach of contract claims.

The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS. The ENGINEER'S decision shall be conclusive, final and binding on both parties.

The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

#### **W. LAND and RIGHTS-OF-WAY**

The OWNER shall obtain all land and rights-of-way necessary for the completion of the WORK pursuant to the CONTRACT DOCUMENTS.

The OWNER shall provide to the CONTRACTOR information which describes the lands owned and rights-of-way acquired.

The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

#### ☐ **X. GUARANTEE**

- ☐ The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of acceptance. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of acceptance of the system that

the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects.

In order to implement the guarantee the OWNER may retain out of the moneys otherwise payable to the CONTRACTOR hereunder two percent (2%) of the amount thereof and may expend the same, in the manner hereinafter provided, in making such repairs, corrections or replacements in the work as the OWNER, in its sole judgment, may deem necessary.

If at any time within the one year period of guarantee any part of the work requires repairing, correction or replacement, the OWNER may notify the CONTRACTOR in writing to make the required repairs, correction or replacements. If the work required is deemed an emergency by the OWNER or his representative, the CONTRACTOR will be duly notified and offered an opportunity to respond within 24 hours. If the CONTRACTOR neglects to commence making such repairs, correction, or replacements to the satisfaction of the OWNER within three (3) days (or 24 hours if deemed an emergency) from the date of receipt of such notice, or having commenced fails to prosecute such work with diligence, the OWNER may employ other persons to make the same. The OWNER shall pay the cost and expense of the same out of the amounts retained for that purpose. Upon the expiration of the said period of guarantee, provided that the work at that time is in good order, the CONTRACTOR will be entitled to receive the whole or such part of the sum last aforesaid, if any, as may remain after the cost and expense of making said repairs, corrections or replacements, in the manner aforesaid, have been paid therefrom.



# **SUPPLEMENTAL GENERAL CONDITIONS**

## **SECTION 00350**

### **SPECIFICATION DRAWINGS**

The Contract Drawings listed in this Section may be modified by addenda and will be issued for construction purposes. These Drawings may be supplemented or superseded by such additional general and detail drawings as may be necessary or desirable as the WORK progresses. The drawings issued for construction at the time or after the signing of the CONTRACT DOCUMENTS will become the CONTRACT DRAWINGS.

Wherever existing conditions or construction not required as part of the work of the contract are shown, they are so shown as a source of information only. The OWNER, while believing such information is substantially correct, assumes no responsibility therefrom. Before starting any work that might be affected by such existing construction or conditions, the CONTRACTOR (and his SUBCONTRACTORS) shall have made himself (and themselves) familiar with all conditions affecting the nature and manner of performing the work and shall not be entitled to any extra compensation for any work or expense arising from or caused by his (or their) neglect to have verified all existing conditions and requirements.

The drawings are not necessarily to scale. All working dimensions shall be taken from the figured dimensions or by actual measurements at the WORK, and in no case by scaling the prints. The CONTRACTOR (and his SUBCONTRACTORS) shall study and compare all drawings and verify all figures before laying out or constructing the work and shall be responsible for any and all errors in the WORK which might have been avoided thereby. Whether or not an error is believed to exist, deviations from the drawings and the dimensions given thereon shall be made only after approval in writing is obtained from the ENGINEER. The CONTRACTOR (and his SUBCONTRACTORS) shall take all measurements of existing established conditions notwithstanding the figured dimensions on the drawings. When figured dimensions are not in agreement with the CONTRACTOR'S (or his SUBCONTRACTORS') measurements, the ENGINEER shall be immediately notified and the ENGINEER will promptly adjust same.

If the CONTRACTOR (or his SUBCONTRACTORS) during the progress of the WORK, discover any discrepancies between the drawings and the specifications, any errors or omissions on the drawings, or any discrepancies between the physical condition of the WORK and the

drawings, then the CONTRACTOR shall immediately notify the ENGINEER, who will promptly adjust same. Any work performed after such discovery without the approval of the ENGINEER shall be at the risk and expense of the CONTRACTOR (or his SUBCONTRACTORS), whoever is responsible. Plans or drawings where the WORK is shown diagrammatically indicate approved working systems. Every piece of material, fittings, fixtures or small equipment is not shown nor every difficulty or interference that may be encountered.

To carry out the true intent and purpose of the CONTRACT DOCUMENTS, all necessary parts to make complete, approved working systems or installation shall be included as if detailed on these drawings.

The location of equipment shown on the drawings, unless exactly dimensioned, shall be considered as approximate only. The CONTRACTOR (and his SUBCONTRACTORS) shall adjust the position of the equipment in accordance with good working practices to meet interferences, provide proper clearance and provide proper access space for operation and maintenance.

Where shown on the drawings, typical details shall apply to each and every item of the contract work where such items are incorporated and the detail is applicable. Unless noted otherwise, such typical details shall be applicable in full.

The OWNER will furnish the CONTRACTOR, without charge, up to six copies of the drawings and specifications for execution of the WORK, including those copies required for permits. Additional copies shall be furnished at the CONTRACTOR'S expense when requested, except that any copies of available plans and specifications returned from bidders in good condition will be furnished to the CONTRACTOR without charge.

All drawings and specifications are the property of the OWNER. The CONTRACTOR shall return all copies if so requested.

#### **DRAWINGS INCLUDED:**

##### **Project Prints (Fifteen sheets)**

- |      |  |
|------|--|
| 1    | Cover                                    |
| 2    | Typical Sections/Details & General Notes |
| 3-15 | General Plans                            |

**INDEX**  
**OF**  
**TECHNICAL REQUIREMENTS**  
**DOVER POINT ROAD BICYCLE SHOULDERS**

**GENERAL REQUIREMENTS ..... 01000-01700**

Summary of Work.....	01000
Alternatives.....	01100
Project Meetings.....	01200
Submittals.....	01300
Quality Control.....	01400
Temporary Facilities and Controls.....	01500
Material and Equipment.....	01600
Project Closeout.....	01700

**EARTHWORK ..... 02000-02500**

General Provisions.....	02000
Mobilization and site work .....	02100
Paving and Surfacing .....	02500

**SPECIAL PROVISIONS ... 03000-03200**

Bicycle Lockers .....	03100
Route Signs .....	03200

## **SUMMARY OF WORK**

### **SECTION 01000**

#### **A. SPECIFICATION ARRANGEMENT**

Titles to and arrangements of sections and paragraphs in these Specifications are used merely for convenience and shall not be taken as a correct or complete segregation of the several categories of materials, equipment, and labor, nor as an attempt to outline or define jurisdictional procedures.

#### **B. INTENT**

The entire work provided for in these technical specifications and on the drawings shall be constructed and finished in every respect in a good workmanlike and substantial manner. All parts necessary for the proper and complete execution of the work, whether the same may have been specifically mentioned or not or indicated on the drawings, shall be done and furnished and installed in a manner corresponding with the rest of the work as if the same were particularly described and specifically provided for herein. It is not intended that the drawings shall show every detailed piece of material or equipment, but such parts and pieces as may be necessary to satisfactorily complete any system in accordance with the best practices and regulatory requirements, even though not shown, shall be furnished and installed. All materials and equipment shall be new unless specifically stated otherwise in these CONTRACT DOCUMENTS.

#### **C. SCOPE OF WORK**

1. The work required by these specifications shall include furnishing all labor, skill, supervision, tools, construction plant, equipment and materials and performing all operations necessary for the properly completed WORK as shown on the drawings, as mentioned in these specifications, and as evidently required with all incidental work necessary and customarily done to the complete satisfaction of the OWNER.

2. General Description of WORK

This project involves painting of bicycle symbols, signage, curb reset and installation of 4 bicycle lockers.



#### **D. CONTRACTOR USE OF PREMISES**

1. The CONTRACTOR expressly undertakes at his own expense:
  - a. to take every precaution against injuries to persons or damage to property;
  - b. to store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
  - c. to place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;
  - d. to clean up frequently all refuse, rubbish, scrap materials, and debris caused by this operation, to the end that at all times the site and the WORK shall present a neat, orderly and workmanlike appearance;
  - e. before final payment, to remove all surplus material, false-work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operation, and to put the site in a neat, orderly condition;
  - f. to effect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the ENGINEER, not to cut or otherwise alter the work of any other contractor.
2. The CONTRACTOR shall not, except after written consent from the proper parties, enter or occupy with men, tools, materials, or equipment, any land outside the rights-of-way or property of the OWNER. A copy of the written consent shall be given to the ENGINEER.

#### **E. SPECIAL REQUIREMENTS FOR WORK**

Special requirements for the WORK consist generally of those measures required to assure uninterrupted operation of existing utilities.

#### **F. COMPUTATION OF QUANTITY**

Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the OWNER to complete the work contemplated by this contract, and such increase or diminution shall in no way vitiate this contract, nor shall any such increase or diminution give cause for claims or liability for damage.

#### **G. COORDINATION**

The CONTRACTOR shall coordinate his operations with the OWNER and utility companies: City sewer and water, Northern Utilities, Verizon, Public Service of New Hampshire, U.S. Sprint and AT&T. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the WORK. The CONTRACTOR, including his

SUBCONTRACTORS, shall keep informed of the progress and the detail work of others and shall notify the ENGINEER immediately of lack of progress or defective workmanship on the part of others. Failure of the CONTRACTOR to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his work.

#### **H. CUTTING and PATCHING**

1. The CONTRACTOR shall do all cutting, fitting or patching that may be required to make the construction and various parts of items come together properly for the completed work.
2. The CONTRACTOR shall not endanger any work already installed by cutting or alterations.
3. Any cost caused by defective or ill-timed work shall be borne by the CONTRACTOR.
4. Cutting and patching shall be done by workmen skilled in the trade which constructs or installs that type of construction. All cutting, fitting and patching shall be done neatly.
5. All patching shall match adjacent similar surfaces.
6. All cutting, fitting and patching shall be subject to the approval of the ENGINEER.

#### **I. REFERENCE SPECIFICATIONS**

Standard specifications such as ASTM, ANSI, NEMA, NFPA, Commercial Standards, State and Federal specifications which are referred to in these specifications shall be the latest revisions thereof and shall include all applicable amendments and revisions which are in effect thirty (30) days prior to the date of submission of bids.

# **ALTERNATIVES**

## **SECTION 01100**

If alternative materials and/or methods are proposed, full substantiation must accompany the bid. Such alternatives must be listed in detail, with accompanying costs along with a concurrent listing of the items and their costs for which the alternatives are being proposed so that an accurate comparison and evaluation may be made by the ENGINEER.

# **PROJECT MEETINGS**

## **SECTION 01200**

### **A. PRE-CONSTRUCTION CONFERENCE**

The CONTRACTOR shall not commence work until a conference has been held at which representatives of the CONTRACTOR, UTILITY COMPANIES, ENGINEER, and OWNER are present.

### **B. DURING CONSTRUCTION**

During construction, weekly meetings may be held between representatives of the ENGINEER, CONTRACTOR and OWNER at a preselected time for the purposes of continual updating of project status and the presentation of an updated schedule.



# **SUBMITTALS**

## **SECTION 01300**

### **A. CONSTRUCTION SCHEDULES**

Planning and progress schedules shall be submitted to the ENGINEER by the CONTRACTOR before starting the WORK and weekly during the progress of the WORK in the form of a bar chart tied to dates with a written description of the methods the CONTRACTOR plans to use in accomplishing the WORK and the various steps he intends to take.

### **B. SHOP DRAWINGS and PRODUCT DATA**

1. Before submittal to the ENGINEER, the CONTRACTOR shall check all shop drawings or samples for conformance with the CONTRACT DOCUMENTS for suitability for satisfactory incorporation in the completed WORK and shall note legibly on the drawings or samples that he has verified its acceptability and that he approved it. If there are any deviations in the shop drawings or samples from the plans and specifications, the CONTRACTOR shall so note these deviations and notify the ENGINEER. The CONTRACTOR shall not commence work on any portion of the contract WORK requiring shop drawings or samples until the drawings or samples have been approved by the ENGINEER.
2. Shop drawings may include general, assembly and detail drawings, diagrams, illustrations, material and equipment schedules with manufacturer's name and catalog numbers and description, performance charts, catalog cuts, brochures and such other information and data as is necessary and required by the ENGINEER.
3. The ENGINEER will review the shop drawings and samples with reasonable promptness. The CONTRACTOR shall allow five (5) days for review. The ENGINEER'S review and approval shall be only for conformance with the design concept of the WORK and with information given in the plans and specifications. The ENGINEER'S approval shall not relieve the CONTRACTOR of responsibility for conforming to the plans and specifications.
4. Three (3) sets of shop drawings will be submitted for review. These drawings shall be submitted sufficiently in advance of commencement of installation of materials and equipment to allow for approval.
5. If the shop drawings are not approved by the ENGINEER, the CONTRACTOR shall correct or make changes as noted and shall submit revised shop drawings until approved by the ENGINEER.
6. Shop drawings shall be submitted as required by the ENGINEER.

# QUALITY CONTROL - INSPECTION

## SECTION 01400

The WORK shall at all times be subject to the observation of the OWNER and ENGINEER. Observation or non- observation by the ENGINEER shall not relieve the CONTRACTOR from his contractual obligation to furnish work and material as required and properly complete the WORK in accordance with these CONTRACT DOCUMENTS. If the ENGINEER considers that the WORK is not being properly accomplished he may condemn or reject all or any part of the WORK and any materials or equipment incorporated in it. If any material, equipment or work is condemned or rejected by the ENGINEER, the CONTRACTOR shall bear all expenses of removal and proper replacement of such material, equipment or work required to be provided by the CONTRACT DOCUMENTS. The expense of replacing any work done by others which is adversely effected by removal and proper replacement of improper work done by the CONTRACTOR shall be borne by the CONTRACTOR.

The OWNER and ENGINEER shall be permitted to inspect all work, materials, payrolls, records or personnel, invoices of materials, and other relevant data and records.

If work to be done away from the construction site is to be observed by the ENGINEER during its fabrication, manufacture, testing, or shipping, such notice shall be in writing and delivered to the ENGINEER in ample time so that the necessary arrangements for the observation can be made.

The CONTRACTOR shall give proper notice to governing departments and inspectors having jurisdiction and shall have all the parts of the work inspected and approved by them as may be required.

Approval from the ENGINEER is required prior to any work on weekends or City holidays.

If the CONTRACTOR works on the weekend or City holiday he will be billed for the ENGINEER'S overtime rate (assume \$28.00 per hour).

# TEMPORARY FACILITIES AND CONTROLS

## SECTION 01500

### A. GENERAL

1. All temporary facilities required by the CONTRACTOR (and his SUBCONTRACTORS), including sanitary, shall be furnished by him (or them) and shall meet all local codes and requirements for such temporary installations. All temporary facilities shall be entirely removed upon completion of the work, and the site shall be left in a satisfactory condition.
2. All temporary facilities shall be provided and maintained so as not to create fire hazards or safety hazards.

### B. SAFETY

1. The CONTRACTOR (and his SUBCONTRACTORS) shall, at all times, exercise reasonable precautions for the safety of all persons. All rules, regulations and laws, concerning safety that are in effect at the job site, shall be complied with in all respects. The *Manual of Accident Prevention in Construction* published by the Associated General Contractors of America shall be used as a guide for safety provisions regarding eliminating hazards on the job. The CONTRACTOR shall also abide by the provisions of the booklet entitled *Safety Regulations as published by the U.S. Army Corps of Engineers*.
2. The wearing of non-conducting hard, safety hats on the job is mandatory. The CONTRACTOR shall be responsible for and shall enforce the wearing of such safety hats by his personnel and the personnel of his subcontractors.
3. All employees must wear substantial work shoes. Approved safety shoes are preferred unless special shoes for the types of work are required.
4. Safety glasses shall be worn by all workmen when performing operations hazardous to the eyes.
5. All tools and devices that require electric power shall be properly grounded.
6. If any blasting for rock ledge or large boulder removal is required for the WORK and is allowed by the proper authorities, then all blasting and handling of explosives shall be

done in accordance with all applicable safety regulations and ordinances concerning such work and shall be done in a manner so as to provide for the safety of all persons and so as not to damage property.

7. The CONTRACTOR shall provide adequate equipment and facilities as are necessary and required, in the case of an accident, for first aid service to any person who may be injured in the prosecution of the work under this contract whether they are his own personnel, his subcontractor's personnel, the ENGINEER, or other persons who may for any reason enter within the limits of the contract work. Also the CONTRACTOR shall have standing arrangements for or have effective written procedure on site, to obtain and provide adequate emergency medical care, and for removal and hospital treatment of any person who may be injured. Such equipment or facilities and arrangements shall be satisfactory to the ENGINEER.
8. The CONTRACTOR will be required, at his own expense, to maintain adequate signage to inform the public of the construction on the site. The signage must meet the approval of the Community Services Director and the Police Department at the pre-construction meeting.

#### **C. FIRE PREVENTION**

All operations on the OWNER'S premises shall be so performed that no fire hazards are needlessly created or permitted to exist. Particular care shall be exercised with regard to the disposition of waste materials, the nature or quantity of which might create or increase a fire hazard. The CONTRACTOR shall make sure that persons employed directly or indirectly by him, while on the OWNER'S premises, comply with any fire prevention regulations of the OWNER. The CONTRACTOR shall be responsible for compliance by personnel of his organization for their cooperation in fire prevention, fire reporting, and protection measures to minimize loss.

#### **D. TEMPORARY ENCLOSURES**

The CONTRACTOR shall provide all temporary wall, door and window closures, as necessary, to keep out weather or intruders and the CONTRACTOR shall take all necessary precautions so that the work may be properly and satisfactorily done during adverse weather and against the possibility of adverse weather.

#### **E. TREE, PLANT, and OTHER PROPERTY PROTECTION**

1. Care shall be exercised to avoid damaging existing trees, shrubbery, poles, signs, fences, walls, lawns, etc., not in the immediate work area, and any damage to these facilities or features as a result of work performed by the CONTRACTOR shall be promptly repaired or replaced by the CONTRACTOR at his expense to the satisfaction of the ENGINEER.



2. Under this Contract, the CONTRACTOR shall be required to protect all property on which the WORK is done and all adjoining property and to satisfactorily repair or replace such properties damaged or destroyed by him or his employees through the construction operation.

#### **F. EROSION CONTROL**

The CONTRACTOR shall comply with the requirements of New Hampshire Water Supply and Pollution Control Commission that requires that sufficient precautions be taken to minimize the run-off, due to construction, of polluting substances such as silt, clay, fuels, oils, bitumens, calcium chloride or other polluting materials harmful to humans, fish, or other life, into the water supplies and surface waters of the State. Unless otherwise permitted by the Commission, control measures must be adequate to assure that turbidity in the receiving water will not be increased to more than 10 *Jackson Turbidity Units (J.T.U.)* in waters used for public water supply or fish unless limits have been established for the particular water. In surface water used for other purposes, the turbidity must not exceed 25 *J.T.U.* unless otherwise permitted by the Commission. Special precautions shall be taken in the use of construction equipment to prevent operations which promote erosion. The CONTRACTOR shall obtain the necessary permits regarding erosion control.

#### **G. AIR POLLUTION CONTROL**

The CONTRACTOR shall conduct his operations so as not to violate any applicable ordinances in effect in the locality pertaining to air pollution.

#### **H. TEMPORARY DRAINAGE**

As necessary, provisions for temporary drainage shall be provided by the CONTRACTOR to keep the working area dry.

#### **I. PRESERVATION OF NATURAL RESOURCES**

All construction operations, contract work, cleanup, and the condition of the adjacent terrain upon completion of the work shall fully comply with all applicable rules, regulations and laws concerning the preservation of natural resources. All regulations relating to preservation of wetlands shall be strictly observed.

## **J. PREVENTION OF WATER POLLUTION**

The CONTRACTOR shall take all such precautions in the conduct of his operations as may be necessary to avoid contaminating water in adjacent water courses or water storage areas whether natural or man-made. All earthwork, moving of equipment, water control of excavations, and other operations likely to create silting, shall be conducted so as to minimize pollution of water courses or water storage areas. Water used during the contract work which has become contaminated with oil, bitumen, harmful or objectionable chemicals, sewage, or other pollutants shall be discharged so as to avoid affecting nearby waters. When water from adjacent natural sources is used in the contract work, intake methods shall be such as to avoid contaminating the source of supply.

# **MATERIAL AND EQUIPMENT**

## **SECTION 01600**

### **A. INSTALLATION**

1. All materials and equipment shall be installed in accordance with the recommendations of the manufacturer and these specifications, and are to perform properly in the completed contract work.
2. All systems shall be completed and left in working order by the CONTRACTOR.

### **B. STORAGE and PROTECTION**

1. Attention shall be directed to the General Conditions concerning protection of property. All materials and equipment at the job site that are to be incorporated in the contract work and that are the responsibility of the CONTRACTOR, shall be adequately stored and protected from damage until completion of the contract work.
2. The CONTRACTOR shall be responsible for protecting all materials and equipment furnished by him and for protecting materials and equipment for the WORK which are furnished by the OWNER or Others. Responsibility shall be vested in the CONTRACTOR for materials and equipment furnished by the OWNER when they have been delivered to the job site by the transporting vehicle. The CONTRACTOR shall report in writing to the ENGINEER, within 24 hours after receipt at the job site of the materials and equipment, whether there is shortage or damage. Unless specified otherwise in these Specifications, responsibility shall be vested in the CONTRACTOR for materials and equipment furnished by others when such items are ready to be incorporated in or connected to the work of the CONTRACTOR.
3. The CONTRACTOR shall be responsible for all damage to any of the work covered by the CONTRACT DOCUMENTS before the final acceptance of the work.

### **C. STANDARD PRODUCTS and SUBSTITUTIONS**

1. Unless otherwise mentioned in these Specifications or shown on the drawings, the materials, fixtures and equipment to be furnished for the WORK shall be standard products of those manufacturers regularly engaged in the production of such equipment and shall be the manufacturer's latest design. All materials, fixtures and equipment shall

comply with the requirements of these Specifications and shall be suitable for proper performance in the completed contract work.

2. No request for substitutions will be considered after submission of proposals except for written emergency requests made because of nonavailability of specified items, delay in delivery, or to adjust to unforeseen field conditions. The written emergency request for substitution shall be accompanied with a photocopy of the letters from the supplier and manufacturer stating the reasons that they are unable to furnish the specified materials. No substitutions for those items mentioned in these specifications or shown on the plans shall be incorporated in the finished work unless written approval is received from the ENGINEER before purchase of those items.
3. Whenever in the Plans and Specifications any item of equipment or material is designated by reference to a particular brand, manufacturer, or tradename, it is understood that an approved equal product, acceptable to the ENGINEER may be substituted by the CONTRACTOR. In the event of acceptance of any alternate or substitution, it shall be the responsibility of the CONTRACTOR to coordinate such alternate or substitute items with all other items to be furnished to assure the proper fitting together of all items. Any additional cost incidental to the coordination and/or fitting together of alternate or substitute items shall be borne by the CONTRACTOR at no extra cost to the OWNER. Similar responsibility applies to items which are left to the CONTRACTOR'S option.

#### **D. DISPOSAL OF UNDESIRABLE and SURPLUS MATERIALS**

All surplus excavated materials, except unsuitable excavation and construction debris, shall remain the property of the OWNER until the CONTRACTOR is notified by the ENGINEER that said material is no longer needed. The surplus material shall be used to fill the areas indicated on the plans. The surplus excavated material shall also remain on site to replace any material deemed unsuitable during excavation. Once said material is deemed as excess by the ENGINEER it will be removed from the OWNER'S property and properly disposed of at no cost to the OWNER.

All unsuitable and waste material shall be disposed of, off the OWNER'S property in approved locations, in accordance with all rules, regulations and ordinances governing such disposal. All excess materials that are not the property of the CONTRACTOR shall be disposed as directed by the ENGINEER and all excess materials belonging to the CONTRACTOR shall be removed from the OWNER'S property. Unsuitable, waste, excess, or other undesirable material shall not be disposed of in a manner so as to become a nuisance to other property users or owners, shall not be disposed of so as to cause a health hazard or ecological damage, and shall not be disposed of so as to cause an eyesore to the public.



# **PROJECT CLOSEOUT**

## **SECTION 01700**

At all times, the CONTRACTOR (and SUBCONTRACTORS) shall keep the WORK area free from the accumulation of waste material or rubbish caused by construction operations. At the completion of the WORK, the CONTRACTOR shall remove all waste materials and rubbish from the OWNER'S property as well as all tools, construction equipment, machinery and surplus materials and shall leave the work area "broom clean". The CONTRACTOR shall leave surfaces of the contract work free from foreign matter. The exterior and interior of all equipment and systems shall be kept clean at all times.

Equipment delivered to the job site with temporary protective coating shall have these removed and the equipment cleaned up satisfactorily.

If the CONTRACTOR fails to clean up, the OWNER may do so, and the cost thereof shall be paid by the CONTRACTOR.

Before completion of the WORK, ruts and scars caused by construction operations under this contract shall be obliterated. Damage to features of the land resulting from the CONTRACTOR'S operations shall be corrected and the land and its features restored as nearly as practicable to its original condition or to any approved changes indicated on the drawings, before final acceptance of the WORK. Any hazardous conditions that could endanger or hinder the OWNER'S utilization of the land shall be corrected immediately. Any drainage ditches plugged due to the CONTRACTOR'S operations shall be restored to allow free flow and removal of surface water. The CONTRACTOR shall be entirely responsible for any unnecessary or excessive damages to lands resulting from his operations.

# **GENERAL PROVISIONS**

## **SECTION 02000**

### **A. CONTRACT DOCUMENTS**

This Section of these Specifications is a part of the CONTRACT DOCUMENTS. All applicable parts of the balance of the CONTRACT DOCUMENTS are equally as binding for this Section as for all other parts of these Specifications.

### **B. WORK INCLUDED**

1. The Work of this Section covers earthwork for the construction of water main, storm drains, drain manholes, and catch basins, consisting of stripping and stockpiling of topsoil, excavation of all materials encountered, trenching and maintenance of excavation, installation of utilities, backfill, fill, providing borrow, compaction and grading.
2. Without limiting the generality of the above, earthwork for the following items is included, but, other earthwork not mentioned here that is indicated or reasonably implied in the drawings shall be included in the work of this Section; unless specifically stated as under the scope of other sections or as by others.

### **C. PROTECTION**

1. Extreme care shall be exercised to avoid existing trees, shrubs, facilities, construction, and utilities that are to remain and all necessary precautions taken to preclude damage to these items, either shown on the drawings, apparent from a field inspection or inherent in the nature of the work. Any damage to these items as a result of work performed by the CONTRACTOR shall be repaired by the CONTRACTOR at his expense.
2. Existing utilities, if and when encountered, shall be supported and protected, and the ENGINEER shall be notified. Entrance, opportunity, and ample time shall be allowed for such measures as may be required for the continuance of such services. Services to be abandoned within excavated areas shall be removed by the CONTRACTOR. Permanent existing utilities near the excavation and/or construction work shall be protected during construction work and any damage to such permanent utilities shall be repaired by the CONTRACTOR without expense to the OWNER.

3. **The CONTRACTOR shall notify Dig Safe (1-800-225-4977) 72 hours prior to excavation.** The CONTRACTOR shall coordinate his construction activities with all public and private utility companies or governmental departments or commissions, prior to commencement of construction, in order to locate all utilities and assure that there will be no damage done to such utilities. The ENGINEER shall not be responsible for any damage done to such utilities either expressed or implied and the CONTRACTOR shall restore and repair any resultant damage without additional compensation.
4. Rules and regulations governing the respective utilities shall be observed. Active utilities shall be adequately protected from damage, and shall not be removed or relocated except as indicated or directed.
5. Any existing property boundary markers, control points and datum elevation markers or bench marks shall be preserved, and all such established survey points which are displaced or destroyed by the CONTRACTOR shall be replaced at the expense of the CONTRACTOR.

#### **D. GRADES and ELEVATIONS**

The Drawings indicate, in general, the alignment and finished grade elevation and underground utility and piping invert grades. The ENGINEER, however, may make such adjustments in grades and alignment as are found necessary in order to avoid interference and to adapt the piping to other special conditions encountered. Grading between indicated final grades shall be smooth, even surfaces, except as otherwise required.

#### **E. TOPSOIL CONSERVATION**

All topsoil existing within the areas in which earthwork will be done, shall be removed and stockpiled in areas free from interference with the work. The material shall be kept free of trash, brush, roots and other excavated material.

#### **F. EARTH EXCAVATION**

1. All excavation work whether cut, general excavation, or trenching shall conform to the following provisions as applicable.
  - a. Excavation shall be performed to elevations and dimensions providing sufficient space to permit proper construction and inspection of the WORK.
  - b. The CONTRACTOR shall excavate all materials of whatever nature encountered. Immediately after excavation has been carried to the required grades, and has been observed by the ENGINEER, the exposed horizontal surfaces shall be properly prepared and construction continued.

- c. If unsuitable bearing material is found the CONTRACTOR shall immediately notify the ENGINEER and shall not proceed further until instructions are given.
  - d. No pipe or structure shall rest partially on rock and partially on soil. If rock is encountered as part of the bottom of the excavation the rock shall be over-excavated by six inches (6") and replaced with approved material suitably compacted.
  - e. Excavation beyond necessary limits shall be refilled with approved material and suitably compacted at no cost to the OWNER.
  - f. The CONTRACTOR shall control the grading around the project such that the ground shall be pitched in order to prevent water from running into the excavated areas to prevent damage to the WORK. Excavation shall be performed in a manner and sequence that will provide drainage at all times.
2. Trench widths shall be sufficient to permit proper installation of the WORK. Trench excavation shall be to depths and widths not greater than necessary for laying and thorough bedding of pipe. All piping shall be properly bedded as described in these Specifications for the type of material being installed. The run of trenches shall be sloped where required for proper functioning of the pipe.

#### **G. MAINTENANCE OF EXCAVATIONS**

1. The CONTRACTOR shall shore and brace excavations, provide all sheet piling, and protect all slopes and earth banks to prevent cave-ins, to protect persons and adjacent construction, and to permit proper execution of the WORK. Shoring and sheeting shall be removed, unless approved otherwise, before backfilling is completed, but not until permanent supports are in place. All sheeting, shoring and bracing shall have sufficient strength and rigidity to withstand the pressures exerted and maintain the walls of the excavation properly in place and protect all persons or property from injury or damage. When excavations are made adjacent to existing structures, or in paved areas, particular care shall be taken to adequately sheet, shore and brace the sides of the excavation to prevent any undermining of or settlement beneath the structures or the pavement. Underpinning of adjacent structures or pavement, when necessary, shall be done in an approved manner. The removal of sheeting, shoring, and bracing shall be done in such a manner as not to endanger or damage either the WORK or any existing structure or property, and so as to avoid cave-ins or sliding of the banks. If for any reason the CONTRACTOR leaves in place any sheeting, shoring or bracing, no payment will be allowed for such material left in place. All costs for sheeting, shoring or bracing shall be included in the unit price for the pipe. Separate payment will not be made. All holes or voids left by the removal of sheeting, shoring or bracing shall be satisfactorily filled and compacted.
2. The CONTRACTOR shall perform all pumping, dewatering, and drainage and provide any well points or other means necessary to keep the excavations dry, protect persons and property, and permit proper excavation of the WORK. The CONTRACTOR shall remove any water from any source which may accumulate during construction. Care shall be taken to prevent soil from entering completed pipes or existing drainage



systems. The CONTRACTOR shall have available at all times sufficient equipment in proper working order for doing the work herein required. All water removed shall be disposed of so as not to create any problems.

## **H. ROCK EXCAVATION**

1. For the purposes of this contract, rock shall be defined as any stone or boulder one cubic yard or more in volume, and any hard natural material or rock ledge that will withstand removal by the usual mechanical methods and that normally requires blasting or continuous drilling for removal. The ENGINEER shall be the sole judge as to whether material encountered shall be classified as rock in accordance with the above description. No rock shall be removed until approved by the ENGINEER.
2. Rock in trenches for pipes and appurtenances shall be excavated a minimum of six inches (6") below the required grade and one foot (1') beyond the outside of the pipe or manhole on each side or a minimum width of three feet (3'), whichever is larger, and backfilled appropriately.

## **I. BLASTING**

If blasting is required and allowed, it shall be done in a safe manner, and the CONTRACTOR shall take all precautions necessary for the protection of persons and property. No blasting shall be performed without permission from all governing authorities and the ENGINEER. Any blasting work approved shall be done conforming to all applicable safety regulations including all State and local regulations. Ample warning shall be given of all blasts. Experienced personnel shall do all blasting operations. Any damage caused by blasting shall be corrected by the CONTRACTOR at no additional expense to the OWNER. No blasting shall be done after 2:00 pm on any given day; also under no circumstances will blasting be allowed during the weekend or a City holiday.

## **J. DISPOSAL OF UNDESIRABLE and SURPLUS MATERIALS**

All surplus excavated materials, except unsuitable excavation and construction debris, shall remain the property of the OWNER until the CONTRACTOR is notified by the ENGINEER that said material is no longer needed. The surplus material shall be used to fill the areas indicated on the plans. The surplus excavated material shall also remain on site to replace any material deemed unsuitable during excavation. Once said material is deemed as excess by the ENGINEER it will be removed from the OWNER'S property and properly disposed of at no cost to the OWNER.

All unsuitable and waste material shall be disposed of, off the OWNER'S property in approved locations, in accordance with all rules, regulations and ordinances governing such disposal. All excess materials that are not the property of the CONTRACTOR shall be disposed as directed by the ENGINEER and all excess materials belonging to the CONTRACTOR shall be removed from the OWNER'S property. Unsuitable, waste,

excess, or other undesirable material shall not be disposed of in a manner so as to become a nuisance to other property users or owners, shall not be disposed of so as to cause a health hazard or ecological damage, and shall not be disposed of so as to cause an eyesore to the public.

#### **K. FILL and BACKFILL**

1. No unsuitable material shall be incorporated in the WORK. Suitable materials from the excavation which conform to the requirements herein or are approved by the ENGINEER shall be used except where more stringent or special requirements are stated. No frozen material may be used. Material from rock excavation shall not be used as backfill. All fills and backfills shall be made with materials available which are acceptably graded, containing sound stone, gravel and sand without a large percentage of silts or clays, or too wet for proper placement. Fill and backfill material shall not contain individual roots, vegetation masses, peat, muck, or other organic or undesirable material. Fill and backfill material shall not contain any debris, wood, broken glass, metal, granite blocks, broken concrete, masonry rubble or other objectionable material. The material within two feet (2') of finish grade in any areas to be paved and within five feet (5') horizontally of any structure shall contain no stone having any dimension exceeding six inches (6"). Unless stated otherwise, gravel shall be used.
2. Materials placed shall be specially compacted by depositing in approximately horizontal layers not exceeding the thickness hereinafter stated but in no case thicker than 12" before compaction. Each layer shall be compacted by suitable vibratory tampers which will secure the required degree of compactness as defined in Section 02000, General Provisions, Paragraph L, of these Specifications.
  - a. Around structures the fill and backfill shall be placed in layers not more than 12" thick. No heavy machinery shall be allowed within 5' of the structure during placing. Material shall not be placed until the structure can satisfactorily withstand the loads imposed by fill and backfill. Backfill at structures shall be brought up evenly on all sides to avoid damage to the structure by uneven loading.
  - b. In trenches after pipe has been installed, bedded, tested, inspected, and approved, material of fine gravel or sand shall be carefully placed and tamped in thin layers around and to a level 12" above the top of the pipe. The remaining excavation shall be backfilled in layers not more than 12" in depth before compacting. No heavy equipment shall be allowed over the pipe until at least four feet (4') of backfill has been placed.
3. Materials
  - a. Bank Run Gravel - shall be composed of hard, durable stone and coarse, fine sand, free from loam and clay and undesirable organic matter, well graded and containing no stone having a dimension greater than 6"; 25-70% shall pass the No. 4 sieve, and not more than 12% of the material passing the No. 4 sieve shall pass a No. 200 sieve. All borrow material shall be gravel unless otherwise specified.

- b. Crushed Stone - shall be durable, crushed rock consisting of the angular fragments obtained by breaking and crushing solid, natural rock, and reasonably free from thin, flat, elongated, or other objectionable pieces. Crushed stone shall further meet the requirements of the NHWS&PCC.
- c. Sand - shall be well-graded coarse sand without excessive fines, free from loam, clay and organic matter. The allowable amount of material passing the #4 sieve shall be between 70-100%. The allowable amount of material passing a #200 sieve shall not exceed 12% by weight. Beach sand shall not be used.
- d. Crushed Gravel - shall be well graded, 95-100% shall pass the 2" sieve, 27-55% shall pass the No. 4 sieve. Also, not more than 12% of the #4 sieve shall pass the #200 sieve.
- e. Suitable Granular Backfill - shall consist of stones, rock fragments, and fine hard durable particles resulting from the natural disintegration of rock. The material shall be free from injurious amounts of organic matter. The wear shall be not more than 60 percent (60%). Not more than 15 percent (15%) of the material passing the No. 4 sieve shall pass the No. 200 sieve and shall meet the following gradation:

95% to 100% passing the 3 inch sieve  
 25% to 70% passing the No. 4 sieve

#### L. COMPACTION

- 1. All fills and backfills shall be compacted sufficiently so that structures, paving, and other construction shall not settle and so that they shall not allow movement of earth and shall prevent subsequent settlement.
- 2. The OWNER will require compaction tests performed to determine the actual in-place densities being attained. Tests on the bank run and crushed gravel will be required **one (1) every one-hundred feet**. All compaction testing shall be at the CONTRACTOR'S expense.
- 3. If any field tests fail to meet the required density then the CONTRACTOR shall remove all of the earthwork in that portion of the work involved and shall replace it to the required density.
- 4. Compaction shall be to the following densities based upon maximum dry density of the optimum moisture content as established by Method D of AASHTO Standard T180 (ASTM D1557) (Modified Proctor) and verified by AASHTO Standard T147 (ASTM D1556):

Under structures.....98%  
 Beside structures..... 95%  
 Top 2' under pavement.... 95%  
 Below 2' under pavement. 95%  
 All other areas..... 90%



#### **M. GRADING**

1. Rough grading - shall be reasonably even and free from irregularities, and shall provide positive drainage away from structures without ditching or pools. Proper allowances shall be made for paving.
2. Fine grading - shall bring the surface to the true line and grade required. The areas fine graded for loaming and seeding shall be raked to remove all stones and other unsatisfactory materials and shall be suitably compacted.

#### **N. PAVEMENT MARKINGS**

1. Retroreflective paint pavement markings (striping and symbols) shall be installed as shown on the construction plans and shall conform to all requirements of NHDOT standard specification 632.

#### **O. CURBING**

1. Curbing shall conform to all requirements of NHDOT standard specification 609.

#### **P. TRAFFIC SIGNS**

1. All traffic signs shall conform to all requirements of NHDOT standard specification 615 and Special Provision 03200. Sign removal shall be subsidiary.

#### **Q. TRAFFIC CONTROL**

1. The CONTRACTOR shall provide a Traffic Control Plan for review and approval by the OWNER'S REPRESENTATIVE prior to any construction activities. Two lanes of traffic shall be maintained at all times. The traffic Control Plan shall meet or exceed the minimum requirements "Work Zone Traffic Control Standard Plans" (TC-1 through TC-8) as published by New Hampshire Department of Transportation.
2. Uniformed Officers and Flaggers shall conform to all requirements of NHDOT standard specification 618 and shall be subsidiary to the traffic control bid item.
3. Maintenance of Traffic shall conform to all requirements of NHDOT standard specification 619 and shall be subsidiary to the traffic control bid item.

#### **R. LOAM & SEED**

1. Loam materials and installation shall conform to all requirements of NHDOT standard specification 641.
2. Seed materials and installation shall conform to all requirements of NHDOT standard specification 646.11.



## **S. EROSION CONTROL**

1. Erosion control materials and installation shall conform to all requirements of NHDOT standard specification 699.
2. The CONTRACTOR shall provide an Erosion Control Plan for review and approval by the OWNER'S REPRESENTATIVE prior to any construction activities. Preparation of the erosion control plan shall be subsidiary to the contract.
3. Monitoring of the erosion control plan shall be subsidiary to the contract.

## **MOBILIZATION AND SITE WORK**

### **SECTION 02100**

#### **A. WORK INCLUDED**

Work under this Section includes clearing along the roadways, site preparation and restoration upon completion of such construction to the extent practicable.

#### **B. CLEARING and GRUBBING**

1. Clearing shall be carefully controlled and exact limits shall be laid out and approved before any clearing is done. Methods shall ensure against damage to trees to remain. Clearing in easements shall be at an absolute minimum of tree removals. Damaged or scarred trees to remain shall be trimmed of damaged branches and treated with wood paint promptly. Burning and/or chipping shall conform to all applicable State and City regulations.
2. The stumps of all trees and brush cleared shall be removed, together with all major roots and satisfactorily disposed of away from the project.
3. All clean loam grubbed from the work area shall be stockpiled on site to be used for loaming and seeding at project clean up.
4. Clearing and grubbing, and any necessary tree removal, shall be subsidiary to Site work.

#### **C. RESTORATION**

Restoration shall include items such as support or replacement of existing utilities, landscaping, removal and replacement of mailboxes, fences, signs and similar construction as required for all equipment, materials, labor and incidental work necessary for the satisfactory completion of the work.

#### **D. SITE WORK**

Site work shall consist of stripping and stockpiling of topsoil, excavation of all materials, backfill, fill, providing borrow, compaction and grading required to complete the project, including but not limited to roadway base preparation, swales and blending in of slopes.

Other earthwork not mentioned here but indicated or reasonable implied in the drawings shall be included in the work of this section.

#### **E. MEASUREMENT and PAYMENT**

1. The lump sum bid price shall be allocated in the ratio of seventy percent (70%) applicable to mobilization and thirty percent (30%) applicable to site restoration. Payments within the above allocations will be as approved by the OWNER'S REPRESENTATIVE. All costs in connection with work under this section shall be included in the lump sum price bid for mobilization.
2. Site work shall be subsidiary. Payment schedule shall be a percentage of the work complete for the entire job.

## **PAVING AND SURFACING**

### **SECTION 02500**

#### **A. WORK INCLUDED**

Work under this Section includes preparation and installation of hot bituminous asphalt surfacing materials and related work as identified herein and shown on the contract plans.

#### **B. HOT BITUMINOUS PAVEMENT**

Hot bituminous pavement shall be installed as shown on the construction plans and as directed by the OWNER'S REPRESENTATIVE. Materials and installation shall conform to all requirements of NHDOT standard specification 403.11.

#### **C. SAWED BITUMINOUS PAVEMENT**

Saw cutting of pavement shall be performed as shown on the contract plans and as directed by the OWNER'S REPRESENTATIVE. Saw cutting of existing pavement shall conform to all requirements of NHDOT standard specification 628, and shall be incidental to the paving items.

#### **D. MEASUREMENT and PAYMENT**

Payment shall be made under the various items of work as shown above for the measured quantity, complete in place at the unit bid price. All additional work necessary to complete the finished surface shall be considered incidental.



## **3100 BICYCLE STORAGE LOCKERS**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS**

- A. Maps of the 4 areas of interest related to the location of the bike lockers. These include:
  - 1. Chestnut Street Parking Lot/Dover Transportation Center – 5 double sided lockers (10 Units total)
  - 2. First Street Parking Lot – 6 double sided lockers (12 Units total)
  - 3. Cochecho Millworks Courtyard area on Central Ave – 5 double sided lockers (10 Units total)
  - 4. Waldron Court/Orchard Street Parking Lot – 5 double sided lockers (10 Units total)

#### **1.02 SUMMARY**

- A. This Section includes the following:
  - 1. Sheet molded fiberglass-reinforced plastic bicycle storage lockers.

#### **1.03 PERFORMANCE REQUIREMENTS**

- A. Delegated-Design Requirements:
  - 1. Provide bicycle storage locker assemblies complying with specific performance and design criteria indicated, including necessary modifications to maintain visual design concept.
    - a. Contract Documents indicate design features, performance requirements, and primary components required, but do not cover details of design and construction, and do not purport to identify nor solve problems of thermal or structural movement, anchorage, or moisture disposal. Requirements shown by details are intended to establish basic dimension of unit, visible lines and profiles of members.
    - b. Compliance with requirements of authorities having jurisdiction is the responsibility of Contractor.
  - 2. Design bicycle storage locker assemblies to accommodate expansion and contraction due to structural movement, movement within system, movement between system and anchorage attachments, dynamic loading and release of loads, and deflection due to external loads, without detriment to appearance or performance, and without damage to bicycle storage lockers system or components.
  - 3. Design bicycle storage locker assemblies and provide clearances that will allow for installation tolerances, expansion and contraction of adjacent materials, and free unobstructed access for users.
  - 4. Design bicycle storage locker assemblies to be free from vibration harmonics, rattles, and noise due to thermal and structural movement, and wind pressure.
  - 5. Design attachments to accommodate anticipated movement with no possibility of loosening, weakening, or fracturing connections between adjoining system components or between system components and building structure.

6. Design anchors, fasteners and braces to be structurally stressed not more than 50 percent of allowable stress when maximum loads are applied.
7. Assemble units with concealed fasteners or locate fasteners in areas inaccessible when locker units are closed.

#### **1.04 SUBMITTALS**

- A. Product Data: For each type of product indicated.
  1. Include construction details, material descriptions, dimensions of individual storage units and profiles, and finishes.
  2. Include rated capacities; shipping, installed, and operating weights; furnished specialties; and accessories.
- B. Shop Drawings: Show fabrication and installation details.
  1. Submit structural design calculations for resistance to design loads.
- C. Samples for Initial Selection: For units with integrally pigmented or factory-applied color finishes for each type of finish indicated.
  1. Include similar Samples of accessories involving color selection.
- D. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.
- E. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- F. Material Certificates: For exterior shell material signed by manufacturer. Prepare written statements on manufacturer's letterhead certifying that products and materials comply with requirements in the Contract Documents
- G. Manufacturer Certificates: Prepare written statement on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Maintenance Data: To include in maintenance manuals.
- I. Warranties: Special warranties specified in this Section.

#### **1.05 QUALITY ASSURANCE**

- A. Installer Qualifications: A firm or individual with sufficient trained staff to install manufacturer's products according to specified requirements.
- B. Manufacturer Qualifications: Company specializing in manufacturing Products specified in this Section with minimum five years documented experience.

- C. Source Limitations: Furnish products from one manufacturer who is capable of showing prior successful production of units similar to those required for entire Project, unless otherwise acceptable to City.
- D. Product Options: Information on Drawings and in Specifications establishes requirements for bicycle storage locker aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods including preconstruction testing, field testing, and in-service performance.
- E. Product Options: Drawings indicate size, profiles, and dimensional requirements of bicycle storage lockers and are based on the specific system indicated. Refer to Part 2 "PRODUCTS."
  - 1. Do not modify intended aesthetic effects, as judged solely by City, except with City's approval. If modifications are proposed, submit comprehensive explanatory data to City for review.
- F. Fire-Test-Response Characteristics: Provide products with the following flammability characteristics as determined by testing identical products by the following method:
  - 1. UL 94 Flammability Rating: Not less than V-2.
- G. Pre-installation Conference: Conduct preconstruction conference at Project site(s) to comply with requirements in Division 1 Section "Project Management and Coordination."

#### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials in original packages and containers with seals unbroken and bearing manufacturer's labels indicating brand name and directions for storage.
- B. Store materials to comply with manufacturer's directions to prevent deterioration from moisture, heat, cold, direct sunlight, or other causes at a location to be specified during the Preconstruction conference.

#### **1.07 PROJECT CONDITIONS**

- A. Field Measurements: Indicate measurements on Shop Drawings.

#### **1.08 COORDINATION**

- A. Coordinate installation of anchorages for bicycle storage lockers. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

## 1.09 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the City of other rights the City may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Submit a written warranty executed by the manufacturer on manufacturer's standard form in which manufacturer agrees to repair or replace components of bicycle storage lockers that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:
1. Structural failures including, but not limited to, excessive top or wall panel deflection, panel delamination, water absorption, surface fiber blooming, spalling, chipping, splitting, cracking, flaking, blistering.
  2. Failure of system to meet performance requirements.
  3. Faulty operation of doors, locks, and access hardware.
  4. Deterioration of shell materials, metals, finishes, and other materials beyond normal weathering.
- C. Warranty Period: Five years from date of Substantial Completion.
- D. Warranty Period for Locks: Five years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

- A. Basis-of-Design Product: The design for bicycle storage lockers is based on ProPark Bicycle Security Locker by Cycle-Safe, Inc., 4630 Ada Drive, Suite B, Grand Rapids, MI 49546, 888-950-6531; fax 616-954-0290; <http://www.cyclesafe.com>. Subject to compliance with requirements, provide the named product or a comparable product by another manufacturer acceptable to the City.

### 2.02 MATERIALS

- A. Fiberglass Reinforced Plastic (FRP): Compression molded, fiberglass reinforced polyester, sheet molding compound (SMC) composed of a layer of fiberglass sandwiched between two layers of through-color-pigmented thermoset polyester resin, extruded into flat sheets, and formed to final shape in heated two-piece matched metal molds. Laminated fiberglass with brittle gel coats is not acceptable for exterior materials.

PROPERTIES	ASTM TEST RESULTS
Impact Strength	12-14 ft-lbs minimum (ASTM D256) (Izod Notched)
Flexural strength	28,000-32,000 psi minimum (ASTM D790)
Flex modulus	1.5 x 10 <sup>6</sup> psi minimum (ASTM D790)
Tensile strength	12,000-16,000 psi minimum (ASTM D638)



Compressive strength	28,000-32,000 psi minimum (ASTM D695)
Water Absorption & Porosity	0.2 % maximum (ASTM D570)
Glass content	32 to 34 minimum percent by weight
Flammability	V-2 Self Extinguishing (UL 94)
Heat Distortion Temperature	350 degrees F (ASTM D648)
Density	0.072 lb/in <sup>3</sup> minimum

- B. Fiberglass Reinforced Plastic (FRP): Manufacturer's standard molded, fiberglass reinforced polyester, composed of polyester resin base and glass fiber reinforcement.

PROPERTIES	ASTM TEST RESULTS
Impact Strength	5 ft-lbs minimum (ASTM D256) (Izod Un-notched)
Flexural strength	20,000 psi minimum (ASTM D790)
Flex modulus	$0.9 \times 10^6$ psi minimum (ASTM D790)
Tensile strength	12,000 psi minimum (ASTM D638)
Water Absorption & Porosity	1.4% maximum (ASTM D570)
Glass content	25 minimum percent by weight
Flammability	Class A (ASTM E84)
Heat Distortion Temperature	150 degrees F (ASTM D648)
Density	0.049 lb/in <sup>3</sup> minimum

- C. Stainless-Steel Sheet: ASTM A 666, Type 302 or 304, stainless-steel sheet, leveled to stretcher-leveled flatness.
- D. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
- E. Aluminum:
1. Plate and Sheet: ASTM B 209 (ASTM B 209M), Alloy 6061-T6.
  2. Extrusions: ASTM B 221 (ASTM B 221M), Alloy 6063-T6.
- F. Aluminum-Alloy Rolled Tread Floor Plate: ASTM B 632/B 632M, Alloy 6061-T6.
- G. Oriented Strand Board: DOC PS 2, Exposure 1, Structural I.
1. Thickness: Not less than 19/32 inch (15 mm).
- H. Slotted Channel Framing: Cold-formed metal channels with continuous slot complying with MFMA-3.

1. Size of Channels: 1-5/8 by 1-5/8 inches (41 by 41 mm).
2. Material: Galvanized steel complying with ASTM A 653/A 653M, commercial steel, Type B, with G90 (Z275) coating; 0.108-inch (2.8-mm) [0.079-inch (2-mm) nominal thickness.

I. Concrete Pads: Refer to Section 3.02 (B) for pad requirements.

J. Anchorages: Anchor bolts; hot-dip galvanized according to ASTM A 153/A 153M.

1. Provide security-type internal fasteners for open-front lockers without doors.

## 2.03 LOCKER FABRICATION

A. Provide a complete, integrated set of manufacturer's standard, mutually dependent components that form bicycle storage lockers, ready for installation on Project site. Bicycle storage lockers shall be capable of withstanding structural and other loads indicated, thermally induced movement, and exposure to weather without failure or infiltration of water into interior.

1. Style: Entry from two sides.
2. Tiers: One.
3. Doors: Left-hand swinging doors.
4. Dual Bike Unit Size: Nominal 38 by 79 inches (965 by 2007 mm).
5. Ganged Unit Capacity: Two bicycles.

B. Fabricate bicycle storage lockers of fiberglass reinforced plastic material as modular units allowing for removal and replacement of any unit without disturbing adjacent units (non-cumulative assembly).

1. FRP Composite Side, Door, and Roof Panels and Frames: Manufacturer's standard thickness, but not less than 0.165 inch (4.2 mm).
  - a. End panels: High-impact ABS plastic material, 0.250 inch (6 mm) thick with FRP return flange.
2. Interior Partitions (end wall and intermediate panels): Manufacturer's standard, and pre-drilled for attachment.

## 2.04 HARDWARE

A. Locking Mechanism: High-security, NAMA standard approved vending machine type pop-out T-handle assembly as manufactured by Complex Lock Co. or another lock manufacturer approved by City.

1. Fabricate locks with the following standard features:
  - a. Lock, cylinder and handle fully countersunk within door face.
  - b. Removable high-security inner cylinder; UL 437 Listed as manufactured by Abloy Lock Co. or another lock manufacturer approved by City.
  - c. Polished chrome housing fully countersunk from door face.
  - d. Escutcheon Plate: 0.050 inch (1.3 mm) thick brushed stainless steel, recessed into door surface surrounding the countersunk lock mechanism area.
  - e. Contract restricted key system, individually keyed with three duplicate keys per cylinder.

- f. Full length stainless steel latch bars and concealed hinges, attached with not less than five 5/16 inch (7.9 mm) diameter threaded fasteners.
- 2. Fabricate locks with the following optional features:
  - a. U-Bolt Locks: Provide U-bolt door hardware to allow user to insert bike lock through projecting U-bolts to block access to the locker locking mechanism. Provide T-handle lock mechanism less cylinder.
    - 1) Door Holder: Manufacturer's standard door check and hold-back.
  - b. Hasp Locks: Provide hasp and staple to allow user to pull-down and padlock to block access to the locker locking mechanism. Provide T-handle lock mechanism less cylinder. Padlocks not included.
  - c. Coin Locks: Provide lock mechanism designed to accept coins for access.
- 3. Keying System: Factory registered, as follows:
  - a. No Master Key System: Cylinders are operated by change keys only. Furnish locks factory installed.
  - b. Master Key System: Cylinders are operated by a change key and a master key. Furnish locks packaged separately for field installation.
  - c. Existing System: Master key or grand master key locks to Owner's existing system. Furnish locks packaged separately for field installation.
- 4. Keys: Nickel silver.
  - a. Quantity: In addition to one extra key blank for each lock, provide the following:
    - 1) Cylinder Change Keys: Three.
    - 2) Master Keys: Five.
- 5. Key Control System: During construction, tag and log key sets with appropriate locker door numbers. Deliver keys and completed log to Owner.
- 6. Key Control Cabinet: BHMA A156.5, Grade 2; metal cabinet with baked-enamel finish; containing key-holding hooks, labels, 2 sets of key tags with self-locking key holders, key-gathering envelopes, and temporary and permanent markers; with key capacity of 150 percent of the number of locks.
  - a. Wall-Mounted Cabinet: Cabinet with hinged-panel door equipped with key-holding panels and pin-tumbler cylinder door lock.
  - b. Portable Cabinet: Tray for mounting in file cabinet, equipped with key-holding panels, envelopes, and cross-index system.
- B. Locker Door Hinges: Full length, concealed, 0.0625 inch (1.59 mm) thickness stainless steel.
- C. Leveling Brackets: Concealed adjustable leveling brackets to allow maximum 4-1/2 inch (114 mm) vertical adjustment.
- D. Identification Number Plates: Manufacturer's standard etched, embossed, or stamped aluminum plates, concealed mounting, sequentially numbered with numbers and letters at least 3/8 inch (9 mm) high.

## 2.05 ACCESSORIES

- A. Accessories: Provide the following for each bicycle storage locker:

1. Equipment storage bin, screw mounted to inside door panel.
2. Interior coat/backpack hook.
3. Cyberlock intelligent access control system.
4. Inspection viewer in door panel or frame.
5. Door Holder: Manufacturer's standard door check and hold-back.

B. Accessories: Provide the following for each bicycle storage locker group:

1. Display frames for both end panels to hold display signage provide by Owner.
2. Security key dispenser.
3. Electric bike recharging station as follows:
  - a. Provide factory installed solar-power distribution system in each locker unit[s]; Model US 64 by Uni-Solar or equivalent. Solar-power distribution system shall have the following nominal electrical characteristics:
    - 1) Rated Power (Wp): 64
    - 2) Operating Voltage VMPP (V): 16.5
    - 3) Operating Current IMPP (A): 3.88
    - 4) Open Circuit Voltage VOC (V): 23.8
    - 5) Short Circuit Current ISC (V): 4.8
  - b. Make provisions for hardwired GFRC outlet in each locker unit[s].

## 2.06 FINISHES, GENERAL

- A. General: Comply with NAAMM's "Metal Finishes Manual for Cityural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- C. Finish shall enable the removal of graffiti without damage to finish.

## 2.07 PLASTIC FINISH

- A. FRP Plastic Finish: Manufacturer's standard factory applied semi-gloss, acrylic-aliphatic urethane finish system with stipple texture.
  1. Color: Manufacturer's standard.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine areas, with Installer present, for suitable conditions where bicycle storage lockers will be installed.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.



### 3.02 INSTALLATION

- A. Comply with manufacturer's written instructions for installation of bicycle storage lockers.
- B. Install bicycle storage lockers on 4-inch- (100-mm-) thick concrete bases reinforced with 6x6x10/10 wire mesh unless otherwise indicated. Finish surface with minimum 2 percent slope for drainage. Form mounting pads 9 inches (228 mm) larger than assembled lockers in both width and length unless otherwise indicated.
- C. Set bicycle storage lockers plumb and aligned. Level base true to plane. Slope to drain.
- D. Fasten bicycle storage lockers to concrete bases with expansion anchors.
- E. Accessories:
  - 1. Identification Plates: Identify bicycle storage lockers in sequence indicated on Drawings or, if not indicated, as approved by Owner.

### 3.03 ADJUSTING AND CLEANING

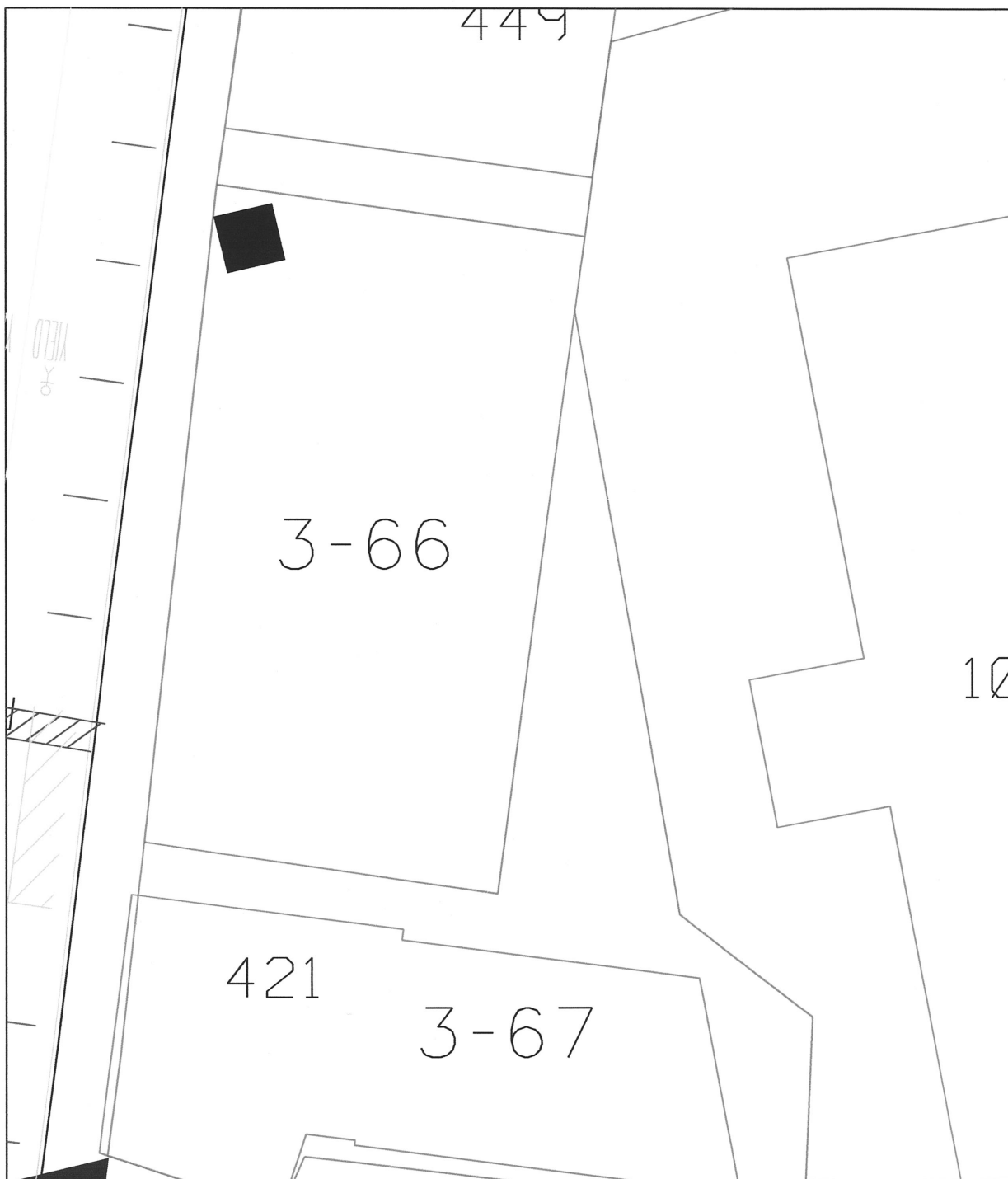
- A. Adjust doors and hardware to operate smoothly, easily, properly, and without binding. Confirm that locks engage accurately and securely without forcing or binding.
- B. Lubricate hardware and other moving parts.
- C. Remove protective coverings from lock cover plates and other surfaces.
- D. After completing installation, inspect exposed finishes and repair damaged finishes.
- E. Touch up marred finishes, or replace lockers that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.



basemap.dgn 07/20/2004 04:17:13 PM THIS IS NOT A SURVEY. EXACT LOCATION TBD. SCALE: 1" = 50'

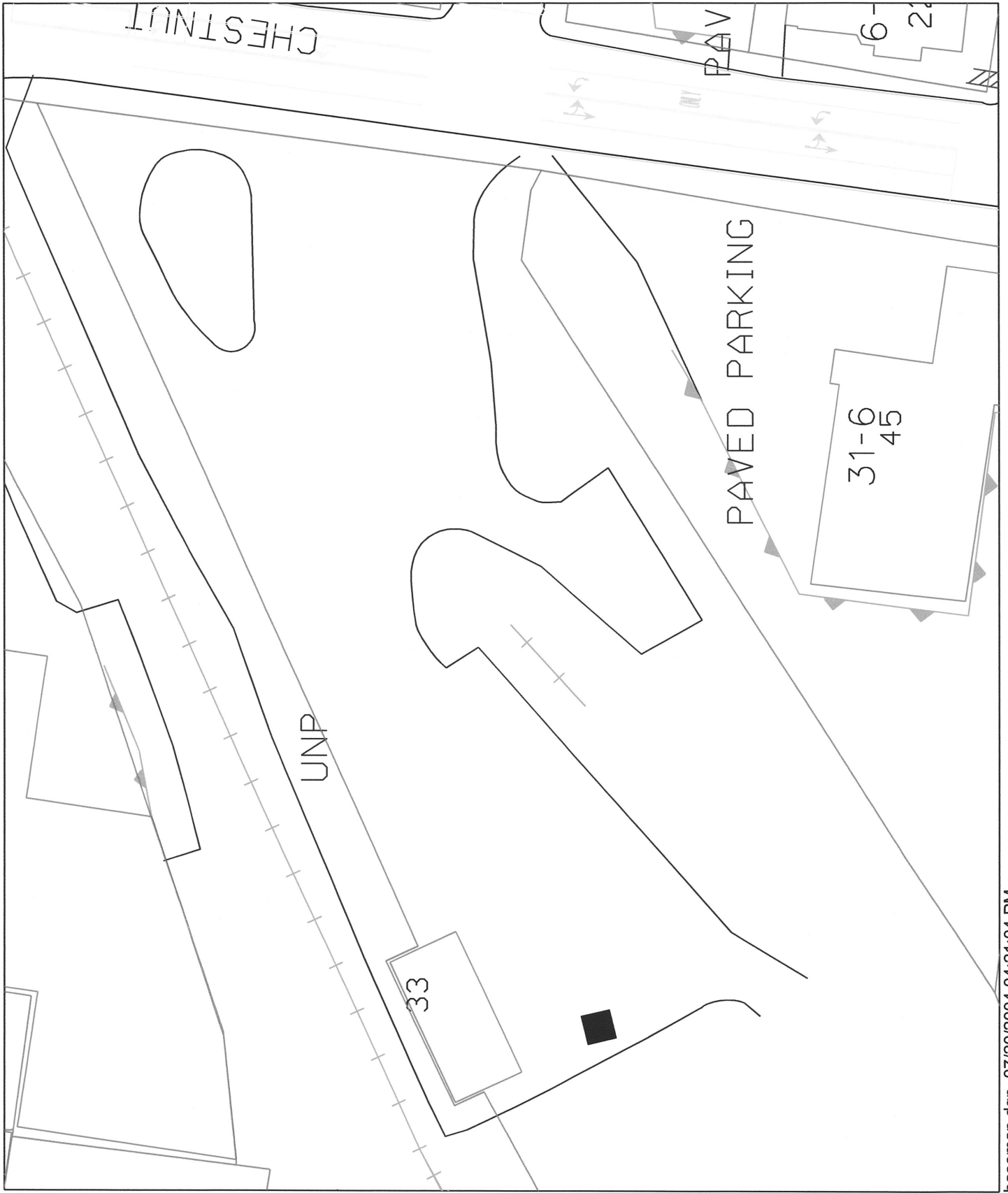


basemap.dgn 07/20/2004 04:19:21 PM THIS IS NOT A SURVEY. EXACT LOCATION TBD. SCALE: 1" = 50'



basemap.dgn 07/20/2004 04:20:08 PM THIS IS NOT A SURVEY. EXACT LOCATION TBD. SCALE: 1" = 30'





## **3200 BICYCLE ROUTE SIGNAGE**

### **PART 1 - GENERAL**

#### **1.01 SUMMARY**

- A. This Section includes the following:
  - 1. Signage for bicycle routes.
    - a. 10 Bike Parking signs
    - b. 20 Bike Route signs

#### **1.02 PERFORMANCE REQUIREMENTS**

- A. Delegated-Design Requirements:
  - 1. Provide bicycle route signage and install signage.
  - 2. Install bicycle signage to permit bicyclists to locate and utilize City created bicycle routes in a safe manner.
  - 3. Install signage to provide clearances that will allow for free unobstructed access by users.
  - 4. Install signage so that it is recognizable for motorists and does not create a visual hazard.
  - 5. Assemble units with square posts compatible with ones currently utilized by the City.

#### **1.03 SUBMITTALS**

- A. Shop Drawings: Show fabrication and installation details.
  - 1. Submit structural design calculations for resistance to wind loads.

#### **1.04 QUALITY ASSURANCE**

- A. Installer Qualifications: A firm or individual with sufficient trained staff to install signage according to specified requirements.
- B. Manufacturer Qualifications: Company specializing in sign products specified in this Section.
- C. Preinstallation Conference: Conduct preconstruction conference at Project sites.

#### **1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials in original packages and containers with seals unbroken and bearing manufacturer's labels indicating brand name and directions for storage.
- B. Store materials to comply with manufacturer's directions to prevent deterioration from moisture, heat, cold, direct sunlight, or other causes at a location to be specified during the Preconstruction conference.

## 1.06 PROJECT CONDITIONS

- A. Installation Locations: Locations for installation will be determined in the field at the pre-installation conference with staff. It is anticipated that approximately 20 Bike Route signs will be installed to designate route locations. It is also anticipated that approximately 10 bike parking signs will be installed identifying locations for bike lockers.
- B. The bike routes are along major arterials, while the bike lockers are located in the urban core.

## 1.07 COORDINATION

- A. Coordinate installation of signage with City staff. Location of signs to be determined in the field.

## PART 2 - PRODUCTS

### 2.01 SIGNAGE

- A. Basis-of-Design Product: The design for bicycle signage is based on the 2003 MUTCD; <http://mutcd.fhwa.dot.gov/HTM/2003/html-index.htm> Part 9 (TRAFFIC CONTROLS FOR BICYCLE FACILITIES) section B.

### 2.02 MATERIALS

- A. Bike Parking Sign:

PROPERTIES	VALUE
MUTCD Code	D4-3
Minimum Sign Size for Shared-Use Path - mm (in)	300 x 450 (12 x 18)
Minimum Sign Size for Roadway - mm (in)	300 x 450 (12 x 18)

- B. Bike Route Sign:

PROPERTIES	ASTM TEST RESULTS
MUTCD Code	D11-1
Minimum Sign Size for Shared-Use Path - mm (in)	600 x 450 (24 x 18)
Minimum Sign Size for Roadway - mm (in)	600 x 450 (24 x 18)

- C. Galvanized Steel Square Post: Posts should be 14 gauge square sign posts and have 7/16" holes on 1" centers the full length of the post allowing signs to be mounted back to back on all four sides at any height. **U Channel style posts are not acceptable.**

### 2.03 FINISHES

- A. Fabrication: The finished members shall be straight and have a smooth uniform finish. It shall be possible to telescope consecutive sizes of tubes freely with a minimum amount of play.

- B. Galvanized Posts: Posts should be conforming to ASTM specification A-653 des. G-90. Corner weld is zinc coated after scarfing operation.

### **PART 3 - EXECUTION**

#### **3.01 EXAMINATION**

- A. Examine areas, with Installer present, for suitable conditions where bicycle signage will be installed.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### **3.02 INSTALLATION**

- A. Comply with manufacturer's written instructions for installation of bicycle signs.
- B. Install bicycle signage on Posts should be 14 gauge square sign posts and have 7/16" holes on 1" centers the full length of the post allowing signs to be mounted back to back on all four sides at any height. **U Channel style posts are not acceptable.**
- C. Anchor Base: A 3' length of square post tubing should be below grade, to serve as an anchor base. Using either hand or power equipment 1" to 2" is left above the surface.
- D. Breakaway post: The sign post should be inserted and bolted into the anchor assembly.
- E. Fasten bicycle signage to posts with standard sign bolts. The bottom of the sign should be 6' above grade.

#### **3.03 ADJUSTING AND CLEANING**

- A. Adjust signs and posts so that they are safe and useful for motorists, pedestrians and bicyclists.
- B. After completing installation, inspect exposed finishes and repair damaged finishes.
- C. Touch up marred finishes, or replace signs that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by sign manufacturer.



**APPENDIX A**

**SAMPLE DOCUMENTS**

## NOTICE OF AWARD

TO: \_\_\_\_\_

DATE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisements for Bids (opened on the \_\_\_\_\_ day of \_\_\_\_\_ 2004).

You are hereby notified that your BID has been accepted in the amount of  
\$ \_\_\_\_\_

You are required to execute the Agreement and furnish the required Certificate of Insurance within ten (10) calendar days from the date of this notice to you.

If you fail to execute said Agreement and to furnish said certificates within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

**OWNER:**

\_\_\_\_\_  
City of Dover, New Hampshire

**BY:**

Paul Beecher

**SIGNATURE:**

\_\_\_\_\_

**TITLE:**

City Manager

## ACCEPTANCE OF NOTICE OF AWARD

Receipt of the above NOTICE OF AWARD is hereby acknowledged, this \_\_\_\_\_ day of \_\_\_\_\_, 2004.

**BY:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_